

IN THE CLAIMS:

Claims 3, 6, 19, 26, and 34 remain as previously pending. Please amend Claims 1, 8, 10, 12-18, 20, 21, 23, 27, 29, 30, 32, 33, 35, 37, and 38. Please cancel Claims 2, 5, 7, 9, 11, 22, 24, 25, 28, 31, 36, and 39-44.

1. (Currently Amended) A wireless communication system comprising:

~~a base station which transmits signals;~~

a mobile unit which receives the signals from the a base station, the mobile unit containing a first-bit-exact speech coder and a second-non bit-exact speech coder, wherein the first-bit-exact speech coder is compatible with the second-non bit-exact speech coder, wherein the non bit-exact speech coder produces a lower quality transmit signal than the bit-exact speech coder, the mobile unit encoding voice data in a signal to transmit using either the first-bit-exact speech coder or the second-non bit-exact speech coder, wherein the first-bit-exact speech coder produces a first transmit signal and the second-non bit-exact speech coder produces a second transmit signal;

a signal strength detector in the mobile unit which ~~determines the quality~~ measures ~~of the signals received by the mobile unit to determine a bit error rate of the received signal, wherein the mobile unit averages several measurements of the received signal to determine an average bit error rate;~~ and

a coder selector in the mobile unit which is in communication with the signal strength detector in the mobile unit, the coder selector in the mobile unit compares the average bit error rate of the received signal to a predetermined threshold to calculate whether ~~directs the mobile unit to switch from between the first-non bit-exact speech coder to and the second-bit-exact speech coder based on when the quality-average bit error rate of the received signals from the signal strength detector;~~

wherein the coder selector switches from the non bit-exact speech coder to the bit-exact speech coder when the average bit error rate of the received signal exceeds the predetermined level ~~threshold;~~ and the coder selector switches from the bit-exact speech coder to the non bit-exact speech coder when the average bit error rate of the received signal is below the predetermined threshold;

wherein the ~~second non bit exact~~ speech encoder reduces power consumption in the mobile unit; and

wherein the second transmit signal is more degraded than the first transmit signal.

2. (Canceled)

3. (Original) The wireless communication system of Claim 1, wherein the coder selector may be bypassed.

4. (Canceled)

5. (Canceled)

6. (Original) The wireless communication system of Claim 1, wherein the signal strength detector measures the estimated frame-by-frame bit error rate.

7. (Canceled)

8. (Currently Amended) A method of conserving power in a wireless communication system comprising the acts of:

measuring in a mobile unit a bit error rate ~~determining the quality of~~ at least one signal received by the mobile unit from a base station;

averaging in the mobile unit several measurements of the received signal to determine an average bit error rate;

comparing in the mobile unit the average bit error rate with a predetermined threshold; and

selecting ~~calculating~~ in a mobile unit whether to switch between a bit-exact speech coder and a secondary non bit-exact speech coder ~~when based on the signal quality~~ average bit error rate;

wherein the mobile unit switches from the non bit-exact speech coder to the bit-exact speech coder when the average bit error rate exceeds a ~~the~~ predetermined value ~~threshold~~ and switches from the bit-exact speech coder to the non bit-exact speech coder when the average bit error rate is below the predetermined threshold;

wherein the ~~secondary non-bit exact~~ speech coder is compatible with a the ~~primary bit-exact~~ speech coder; and

wherein the ~~secondary non bit-exact~~ speech coder produces a lower quality signal than the primary bit-exact speech coder.

9. (Canceled)
10. (Currently Amended) The method of Claim 8, wherein the act of ~~selecting a~~ secondary ~~switching to the non bit-exact~~ speech coder may be selectively activated.
11. (Canceled)
12. (Currently Amended) The method of Claim 8, wherein the ~~secondary-non~~ bit-exact speech coder is one of a family of speech coders which can exchange compatible data.
13. (Currently Amended) The method of Claim 8, wherein the ~~secondary-non~~ bit-exact speech coder saves power.
14. (Currently Amended) The method of Claim 8, wherein the ~~secondary-non~~ bit-exact speech coder reduces processor loading.
15. (Currently Amended) The method of Claim 8, wherein measuring in the mobile unit the bit error rate ~~the quality of signals received is determined by comprises~~ measuring the-an RX Quality figure of the received signal.
16. (Currently Amended) The method of Claim 8, wherein measuring in the mobile unit the bit error rate ~~the quality of signals received is determined by comprises~~ measuring the-an estimated frame-by-frame bit error rate of the received signal.
17. (Currently Amended) The method of Claim 8, wherein measuring in the mobile unit the bit error rate ~~the quality of signals received is comprises~~ determined by determining a parity check of the received signal..
18. (Currently Amended) A wireless communication system comprising:
 - a processor usage indicator in a mobile unit which determines the loading on a processor in a ~~the~~ mobile unit; and
 - a speech coder selector in a ~~the~~ mobile unit which is in communication with the processor usage indicator, the speech coder selector in the mobile unit compares causes the mobile unit to a secondary speech coder when the loading on the processor to a predetermined threshold to calculate whether to switch between a non bit-exact speech coder and a bit-exact speech coder based on the loading on the processor from the processor usage indicator;
 - wherein the speech coder selector switches from the bit-exact speech coder to the non bit-exact speech coder when the loading on the processor exceeds a set value ~~the predetermined threshold and switches from the non bit-exact speech~~

coder to the bit-exact speech coder when the loading on the processor is below the predetermined threshold_i;

wherein the ~~secondary non bit-exact~~ speech coder is compatible with athe primary bit-exact speech coder_i and

wherein the ~~secondary non bit-exact~~ speech coder is less accurate than the primary bit-exact speech coder.

19. (Original) The wireless communication system of Claim 18, wherein the speech coder selector may be selectively activated.

20. (Currently Amended) The wireless communication system of Claim 18, wherein the ~~secondary non bit-exact~~ speech coder saves power.

21. (Currently Amended) The wireless communication system of Claim 18, wherein the ~~secondary non bit-exact~~ speech coder reduces processor loading.

22. (Canceled)

23. (Currently Amended) The wireless communication system of Claim ~~22~~18, wherein the ~~primary bit-exact~~ speech coder and the ~~secondary non bit-exact~~ speech coder are members of a family of speech coders.

24. (Canceled)

25. (Canceled)

26. (Previously Presented) The wireless communication system of Claim 23, wherein encoded data may be decoded by a single decoder.

27. (Currently Amended) A wireless communication system comprising;

a signal strength indicator in a mobile unit which determines the quality of measures a signal received by a the mobile unit to determine a bit error rate of the received signal, wherein the signal strength indicator averages several measurements of the received signal to determine an average bit error rate; and

a speech coder selector in the mobile unit which is in communication with the signal strength detector in the mobile unit, the speech coder selector in the mobile unit compares the average bit error rate on the received signal to a predetermined threshold to calculate whether causes the mobile unit to use to switch between a bit-exact speech coder and a non bit-exact speech coder based on the average bit error rate of the received signal from the signal strength indicator;

wherein the speech coder selector switches from the a ~~secondary~~non bit-exact speech coder to the bit-exact speech coder when the signal-strengthaverage bit error rate of the received signal exceeds a set value~~the predetermined threshold~~ and the speech coder selector switches from the bit-exact speech coder to the non bit-exact speech coder when the average bit error rate is below the predetermined threshold;

wherein the primary-bit-exact speech coder and the secondary-non bit-exact speech coder can exchange compatible data; and

wherein the secondary-non bit-exact speech coder is a lower quality speech coder than the primary-bit-exact speech coder.

28. (Canceled)

29. (Currently Amended) The wireless communication system of Claim 27, wherein the speech coder selector may switch between the primary-bit-exact speech coder and the secondary-non bit-exact speech coder each frame.

30. (Currently Amended) A wireless communication system comprising;

means for measuring in a mobile unit determining the qualitya bit error rate of a signal received by the mobile unit from a base station;

means for averaging in the mobile unit several measurements of the received signal to determine an average bit error rate;

means for comparing in the mobile unit the average bit error rate with a predetermined value; and

means for calculatingswitching in a the mobile unit whether to switch betweenfrom a first bit-exact speech coder to and a second non bit-exact speech coder based on the average bit error rate;

wherein the mobile unit switches from the non bit-exact speech coder to the bit-exact speech coder when the signal-qualityaverage bit error rate exceeds a the predetermined value and switches from the bit-exact speech coder to the non bit-exact speech coder when the average bit error rate is below the predetermined value;

wherein the second-non bit-exact speech coder is compatible with the first bit-exact speech coder; and

wherein the ~~second-non bit-exact~~ speech coder is a lower quality speech coder than the first-bit-exact speech coder.

31. (Canceled)

32. (Currently Amended) The wireless communication system of Claim 30, wherein the ~~second-non bit-exact~~ speech coder consumes less power than the first-bit-exact speech coder.

33. (Currently Amended) The wireless communication system of Claim 30, wherein the switching ~~means~~-is software controlled.

34. (Original) The wireless communication system of Claim 30, wherein the predetermined value may be dynamically adjusted.

35. (Currently Amended) A wireless communication system comprising;

means for determining in a mobile unit the loading on a processor in the mobile unit; and

means for ~~switching-comparing~~ in a ~~the~~ mobile unit which is in communication with the means for determining, the means for comparing compares the loading on the processor to a predetermined threshold to calculate whether to switch between a non bit-exact speech coder and a bit-exact speech coder based on the loading on the processor;

wherein the means for comparing switches from a firstthe bit-exact speech coder to a secondthe non bit-exact speech coder when the processor-loading on the processor exceeds the predetermined threshold and switches from the non bit-exact speech coder to the bit-exact speech coder when the loading on the processor is less than a set-valuethe predetermined threshold;

wherein the ~~second-non bit-exact~~ speech coder is compatible with the first bit-exact speech coder,; and

wherein the ~~second-non bit-exact~~ speech coder is a lower quality speech coder than the first-bit-exact speech coder.

36. (Canceled)

37. (Currently Amended) The wireless communication system of Claim 35, wherein the switching ~~means~~-may be selectively disabled.

38. (Currently Amended) The wireless communication system of Claim 35, wherein the ~~first~~bit-exact speech coder and the ~~second~~non bit-exact speech coder are members of a family of speech coders which can exchange compatible data.

39.- 44.(Canceled)